USER MANUAL

QSB-636E
QSB-648E

BOOSTER AMPLIFIER

1. **Security Precautions**

◎ Carefully to **READ** the instruction in this manual before use.
◎ Certainly to **OBSERVE the INSTRUCTION** in this manual regard convention of safety symbols and messages.
◎ Please **KEEP** this user **MANUAL** nearby for anytime reference.

Safety symbol and Message Conventions

Below-described safety symbol and messages are to prevent bodily injury and property damage. Before operating the amplifier, read this manual first so you completely knowing the potential safety hazard and understanding the meaning of the safety symbols and messages.

⚠ WARNING	Indicates a potentially hazardous situation, which, if mishandled, could result in death or serious body injury, and/or property damage.
⚠ CAUTION	Indicates a potentially hazardous situation, which, if mishandled, could result in moderate or minor body injury, and/or property damage.

⚠ WARNING

■ When Installing the Amplifier

- **DO NOT** installing or mounting the amplifier in unstable locations, such as on the rickety table or the slanted surface. It may result in the amplifier falling down and causing body injury and/or property damage.
- **Be sure to ground** to the safety ground (earth) terminal to avoid electric shock. Never to ground to a gas pipe for tragic disaster may occur.
- Use the amplifier only with the voltage specified on the amplifier. Using the voltage higher than specified may cause fire or electric shock.
- **DO NOT** cut, twist, damage, nor modify the power supply cord. In addition, avoid using the power cord close to heaters, and don't place heavy object, including the amplifier itself, on the power cord, for it may cause fire or electric shock.
- **DO NOT** expose the amplifier to rain or the environment where it may be splashed by water or other liquids, for doing so, it may cause fire or electric shock.

■ When using the Amplifier

- When found following irregular situation during amplifier is in use, immediately switch off the power, disconnect the power supply plug from the AC outlet. Don't try to operate the amplifier again. Contact your local dealer to check the amplifier.

  - ✓ The amplifier falls.
  - ✓ Amplifier is malfunction.
  - ✓ Water or any metallic object gets into the amplifier.
  - ✓ The smoke or strange smell coming from the amplifier.
  - ✓ The power supply cord is damaged, such as exposure of the core, disconnection etc.

  - **DO NOT** put cups, bowls, or other containers with liquid or metallic object in it on the top of the amplifier. If they spill accidentally into the amplifier, it may result in fire or electric shock.
  - **DO NOT** touch the power supply plug during thundering and lightning, for it may result in electric shock.
  - **DO NOT** insert or drop the metallic objects or flammable materials into the ventilation slots of the amplifier, for it may result in fire or electric shock.
  - **DO NOT** open nor remove the amplifier cover to prevent fire or electric shock, for there are high voltage components inside the amplifier.

⚠ CAUTION

■ When Installing the Amplifier

- **DO NOT** remove nor plug in the power supply plug with wet hands, for it may cause electric shock.
- When unplug the power supply cord, be sure to grasp the power supply plug. DO NOT pull on the cord itself. Operating the amplifier with damaged power supply cord may cause fire or electric shock.
- **Avoid** installing the amplifier in humid or dusty places, the area exposed to the direct sunlight, locations generating smoke or steam, or the spot near the heaters. It may result in fire or electric shock.
- When moving the amplifier, be sure to remove its power supply cord from the wall outlet. Moving the amplifier with the power cord connected to the outlet may cause damage to the power cord, and resulting in fire or electric shock. When removing the power cord, be sure to grasp its plug to pull.
- **DO NOT** Block the ventilation slots of the amplifier chassis. It will cause the temperature rising and result in fire.

■ When Using the Amplifier

- Make sure that the volume control is turned to minimum position before power is switched on. Loud sound produced at high volume when power is switched on may impair hearing.
- **DO NOT** place heavy objects on the amplifier, for it may cause it fall and may result in body injury and/or property damage. Besides, the object itself may cause damaged or body injury.
- **DO NOT** operate the amplifier for the extended period of time with the sound distorting. It is an indication of malfunction, which can cause heat and result in fire.
- Switch the power off, and unplug the power supply plug from the AC outlet for safety purposes, when cleaning or leaving the amplifier unused for 7 days or more. Fire or electric shock may occur.
- If the dust accumulates on the power supply plug or in the wall AC outlet, fire may result in. Clean it periodically. In addition, make sure the plug is inserted in the wall outlet securely.
- Contact your local dealer to clean the dust, it the dust has accumulated in the amplifier for a long period of time. Dust accumulation may result in fire or damage.

2. Description

QSB-6xxE series booster amplifiers cover models from 120W RMS to 480W RMS. This manual is for 360W QSB-636E and 480W QSB-648E.

QSB-6xxE series is easy to use booster amplifier. It has one phone jack and one XLR jack as input; and the same as output. And there is one screw speaker output terminal for the direct connection to 8 ohm, or 70V, or 100V speaker.

There is only one set of LED as power on and level indicators on the front panel. On the rear panel the sensitivity selection switch is for the sensitivity 100mV or 1V selection. Beside the switch, there is one gain control for the input signal adjustment.

Besides 115 / 230V AC power source, QSM-6xxE series booster amplifier also accept DC 24V battery power source as backup power.

To ensure the amplifier working normally and safe operation, it has speaker short, over temperature, and overload protection function.

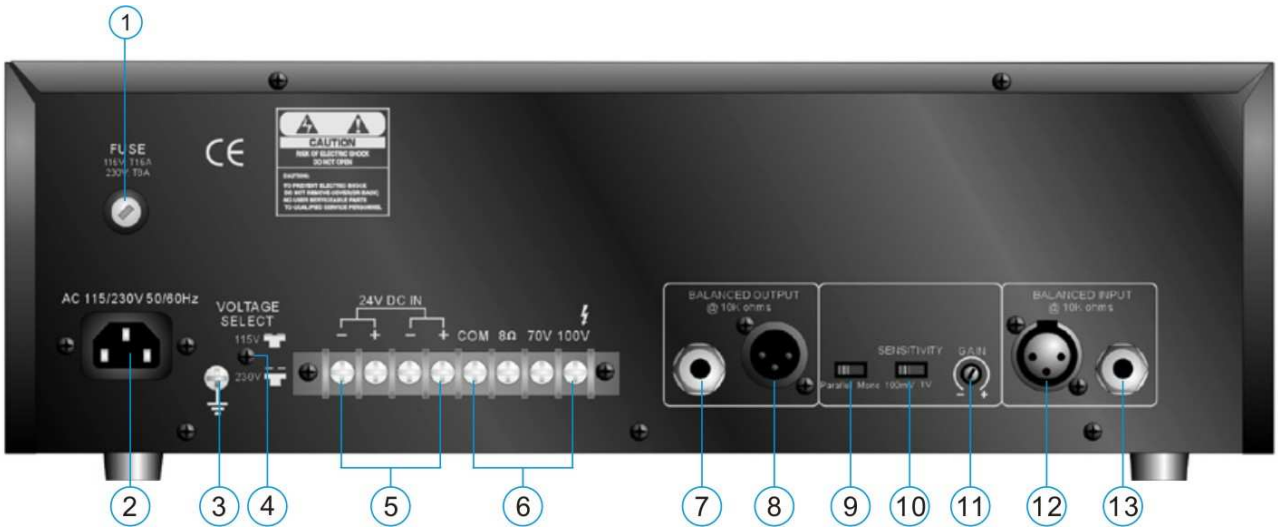
QSM-6xxE series is simple and easy to use booster amplifier.

3. Panel Description

FRONT PANEL DESCRIPTION

1. Power On Indicator LED
2. Level Indicator LED
3. Power Switch

REAR PANEL DESCRIPTION



1. AC Fuse
2. AC Power Input Socket
3. Earth Connection Screw
4. AC Voltage (115V/230V) Selection Switch
5. DC Power Supply Terminal
6. Speaker Output Terminal
7. Phone Output Jack
8. XLR Output Jack
9. Parallel/Mono Selection Switch
10. Sensitivity (100mV /1V) Selection Switch
11. Gain Control
12. XLR Input Jack
13. Phone Input Jack

4. Features

- Easy to use booster Amplifier
- 8 ohm, 70V and 100V speaker output
- One XLR and Phone jack for input and output
- Sensitivity Selection Switch
- Overload, over temperature, and speaker short protection.
- AC or DC power in
- 3U height
- 19” rack or table mounted

5. Power Source

● AC Power Source

The supply transformer has been designed for AC 230V /115V (±10%) 50 /60 Hz.

● DC Power Source

Battery Connection (24Vdc)

When using external batteries, ground the amplifier via the screw terminal. (Electrical stability of the system will be improved by providing a good earth ground.) When connecting batteries, please ensure correct polarity.

6. Connection

● Input Connection

Connect signal source to input jack by using phone jack cable.

● Output Connection

Connect output jack to other amplifier by using phone jack cable.

● Speaker Output Connection

The speaker output screw terminal is on the rear panel. It can connect low impedance 8 ohm, or high-level 70V or 100V speaker. Use only one of these output connections for corresponding speaker.

● Sensitivity Selection Switch

Put the switch on 100mV or 1V position for corresponding sensitivity of signal source from other device.

7. Operation

After all connections are completed, turn on the power. If necessary, turn the level control of the source device to what you desire.

8. Technical Specification

Type		**Booster Amplifier**	
Model		**QSB-636E**	**QSB-648E**
Output Power (RMS)		360W	480W
Power Supply	**Main Voltage**	AC 115V or 230V 50/60Hz	
	Battery Voltage	DC 24V	
Total Harmonic Distortion		<= 1% @ 1KHz, rated power	
Sensitivity		XLR, Phone Jack (Balanced) 1V, 100mV @ 10K ohm	
Outputs		8Ω, 70V, 100V	
Signal to Noise Ratio		86 dB	
Indicator		Power On, Level	
AC Power Consumption		960W	1280W
DC Power Consumption		24A	30A
Dimensions (mm)		132(H) x 425(W) x 355(D)	
Weight		15 Kgs	17 Kgs
Mounting options		Desktop or 19” rack	

WARNING: THIS APPLIANCE MUST BE EARTHED